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ABSTRACT

Delay of gratification, or the ability to endure self-imposed barriers to achieve particular goals, was tested through a series of surveys given to 151 white undergraduates in an introductory psychology course at a university in the southwestern United States. The study examined the multidimensionality of delay of gratification and was concerned with the sociopolitical dimension and the relationship of academic oriented delay to academic achievement. The survey instruments were designed in the traditional forced-choice format in which two alternatives were presented, one representing delay of gratification and the other representing immediate gratification. The results were then compared to surveys given in an earlier study to black student leaders and found to be similar. Future research should focus on the sociopolitical dimension to provide a better understanding of the psychological complexity of human decisions and behaviors. Two tables and three references are included. (DJC)

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MULTIDIMENSIONAL DELAY OF GRATIFICATION AND ACADEMIC ACHIEVEMENT

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Introduction

Delay of gratification, or the ability to endure self-imposed barriers to achieve particular goals and affect one's own environment and outcomes, has received considerable attention in the study of self-regulation. This investigation involves the theoretical expansion of the delay of gratification construct by examining its multidimensional aspects, an issue which previous research in this area has not examined (see Ward, Banks & Wilson, in press).

One dimension may exist in the form of sociopolitical delay preference. Examples of such behavior include the self-denial of immediate gains/needs of lesser value (e.g. food, transportation to work, etc.) in favor of more highly prized, but distal prosocial or moral goals (e.g. housing, jobs, education, and greater freedom itself). Readily cited examples of such sociopolitical delay include the protest of Apartheid in South Africa, the Solidarity Movement in Poland, and boycotts during the Civil Rights Movement. These actions taken by group of individuals may be reflecting a form of delay behavior, i.e. both at the individual and group levels, that has not been assessed traditionally.

In our initial study, we examined the multidimensionality of delay of gratification in black college student leaders and found support for this approach (see Ward, Perry, Woltz, Doolin and Zeigler, 1987). Specifically, results revealed a sociopolitical dimension (focusing largely on Apartheid and similar discriminatory situations) and an achievement dimension (consisting of academic and career issues). The present study examines the generalizability of these findings to a different population, i.e. white college students, to investigate whether similar dimensions (especially the sociopolitical) obtain for members of the broader society and not only for members of groups who have experienced disproportionate economic and social inequities. This study also examines the influence of the delay dimensions on academic success.

Method

A total of 151 white undergraduates enrolled in an introductory psychology class at a comprehensive university in the Southwest completed several survey instruments. Ss, who received course credit for their participation, first completed a questionnaire that provided basic demographic information (e.g. age, sex, classification, etc.). The sample consisted of 81 females (mean age = 20 years) and 70 males (mean age being 19 years and 7 months) with the total mean age being 19 years and 7 months.

Delay of Gratification Scale: This questionnaire utilized the traditional forced-choice format in which two alternatives were presented and Ss were asked to "Mark an X on the line next to the choice you agree with most." The order of presentation of choices indicating a preference for delay of gratification was alternated with choices indicating a preference for immediate gratification. Responses indicating preference for delay were scored 1 and those reflecting preference for immediate gratification were scored 0. Examples of an item on the questionnaire follow:

In my opinion

a. it would be better for Blacks as a group in the long run, if they would boycott retailers who support Apartheid, even if it means doing without preferred goods when they need them, or

b. Blacks should purchase their preferred products from whomever has the "best" buy at the time;

I would rather

a. choose a career that I really want to pursue even though I may have to wait a long time for the "payoffs", or

b. choose a career that I could begin immediately and has immediate "payoffs."

Results

Factor Analysis: Using the SAS software package, the 29* items from the Delay of Gratification Scale were subjected to a principal components factor analysis with varimax rotation. Two-factor analysis was conducted to see whether structures similar to those obtained with Black student leaders emerged. Results indicated that two clearly interpretable factors (similar to those found with Black students) emerged that had relatively high reliability estimates. Nineteen of the 29 items loaded significantly on these two factors at a level of .30 or above (see Table 1). The items loading more strongly on Factor 1 (eigenvalue = 3.50) reflecting a dimension tapping a general Sociopolitical domain. Those items loading on Factor II (eigenvalue = 2.21) more closely represent an Achievement orientation in both career and academic domains. The alphas for both variables were relatively high: Sociopolitical = .73; Achievement = .64.

To examine the influence of the delay dimensions on academic success, as measured here by cumulative college GPA, stepwise multiple regressions were run using achievement delay, socio-

* Twenty-nine of the original 30 items developed by Ward, Perry, Woltz, Doolin and Zeigler wre administered to this sample of students. The additional one was made a filler item because it was judged to be less relevant to white students (i.e. the purchase of special hair products from black companies).

political delay and ACT score as predictors. ACT score and achievement delay predicted 32% of the variance in student GPA [$F(2, 131) = 31.19$, $p < .001$], ACT accounting for 28% of the variance and achievement delay accounting significantly for an additional 4% (see Table 3).

Discussion

The results of the present study indicating sociopolitical and achievement delay provide further support for our notion of multidimensional delay of gratification. The findings obtained for white students were similar to those obtained for black students. Support for the newly discovered sociopolitical dimension is important because it provides additional evidence for the need to study further and systematically an aspect of self-regulation relevant to a better understanding of the psychological complexity involved in many current, real-life decisions and behaviors that are intended to further the social good. Directions for future research include the investigation of different types of populations (other ethnic groups, leaders and non-leaders, etc.). Additionally, it would be important to examine the sociopolitical dimension by focusing on different sociopolitical issues (e.g. Solidarity Movement) that reflect delay of gratification processes. This dimension should also be examined among non-college populations as well: for example, political leaders, civil rights activists, and even among

individuals who are exposed to various leadership training opportunities. Finally, the finding that achievement oriented delay significantly predicted academic achievement for this sample indicates the usefulness of this dimension to a better understanding of factors contributing to academic success.

References

Mischel, W. (1986). Introduction to personality: A new look. New York: Holt, Rinehart & Winston.

Ward, W.E., Banks, W.C. & Wilson, S. (in press). Delayed gratification in blacks. In R. L. Jones (Ed.), Black psychology (3rd ed.). New York: Harper & Row.

Ward, W.E., Perry, T.B., Woltz, J. Doolin, E., & Zeigler, A. Multidimensional delay of gratification among black college student leaders. Paper presented at the Twentieth Annual Association of Black Psychologists Convention, Atlanta, August, 1987.

TABLE 1

FACTOR ANALYSIS OF POOL OF DELAY OF GRATFICATION ITEMS

Dimension	Item #	Factor I: Sociopolitical Factor II: Achievement	Varimax Rotation Factors I	 II
S	(38)	In my opinion Black students would be better off as a group if they refused student aid from companies that support Apartheid, even if the students had to work extra during school (Grp)	.75	-.15
S	(14)	In my opinion it would be better for Blacks as a group in the long run if they would boycott retailers who support Apartheid, even if it means doing without preferred goods when they need them (Grp)	.67	.15
S	(20)	In my opinion it would be better for Blacks as a group in the long run to refuse to work for a firm that has interests in South Africa, even if they had to work two jobs instead of one to earn the same income (Grp)	.63	-.03
S	(23)	I would rather shop from a grocery store further away and less convenient because it does not support discriminatory practices (Ind)	.58	-.02
S	(26)	In my opinion it would be better for Blacks as a group in the long run if leaders of Black firms were to refuse to sell to firms or countries that discriminated against any minorities, even if it means temporarily experiencing financial losses (Grp)	.58	.02
S	(35)	I would rather actively choose not to participate in a university club that discriminated against any group of people, even if it meant not going to Friday night dances and parties with my friends (Ind)	.48	-.13
S	(7)	In my opinion Blacks would better themselves as a group in the long run, if they purchased products made by Black companies even if they cost more and are more difficult to purchase (Grp)	.44	.02
S	(4)	I would rather work extra even if it means not accepting a scholarship from a company that supports Apartheid (Ind)	.41	.02

TABLE 1 (cont'd)

FACTOR ANALYSIS OF POOL OF DELAY OF GRATFICATION ITEMS

Dimension	Item #	Factor I: Sociopolitical 55.4 * / Factor II: Achievement 44.6 *	Varimax Rotation Factors I	Varimax Rotation Factors II
A	(15)	In would rather live in a small cheaper apartment in order to save money for after graduation (Per-Acad)	-.06	.54
A	(37)	I would rather take a heavier load of courses for fewer semesters in order to take a year off before work or graduate school (Acad)	.10	.51
A	(16)	I would rather choose a career that I really want to pursue even though I might have to wait a long time for the "pay offs" (Career)	.26	.48
A	(12)	I would rather study really hard and increase my chances of getting into a really good graduate school after graduation (Acad)	.29	.47
A	(5)	I would rather stay in school and travel after graduation (Acad)	.03	.45
A	(34)	I would rather continue to go to school for four years in hopes of getting a higher paying job once I graduate (Career)	.11	.44
A	(18)	I would rather study a little every day to prepare for future tests even though I have less free time (Acad)	.31	.43
A	(10)	I would rather go to summer school so I could graduate early and get a good job sooner (Career)	.13	.42
A	(1)	I would rather save the money I make to buy a car in two years (Per)	-.10	.38
A	(28)	I would rather major in a field that requires a great deal of school work because it may lead to a better job after graduation (Career)	.20	.37
A	(8)	I would rather do without furniture for a few months and save enough to buy new furniture later (Per)	-.02	.35

Eigenvalues: 3.50, 2.21; Variance: 20%

Alpha: .73, .64

* Percent Common Variance After Rotation

TABLE 2

Correlation Matrix for Variables in Model

	ACT	Achieve	Sociopol	Col GPA
ACT	--	.08 (n=134)	-.07 (134)	.53* (134)
Achieve		---	.23* (151)	.24* (150)
Sociopol			--	.04 (150)
Col GPA				--

* p < .01

TABLE 3

Regression Model Predicting Academic Achievement

	Model-Acad. Achi.	
Variables	B	S.E.
Constant	.68	
ACT	.07	.01
Achiev.- Delay	.07	.02
R^2 for ACT only		.28 **
R^2 for ACH only		.04 **
R^2 for ACT and ACH		.32 **

N = 133

* p < .05 level
** p < .01 level